

# D37X3 COM PORT CONFIGURATION

Kontron Motherboards – Whitepaper

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## Overview

Special configuration of COM3 and COM4 is necessary, depending on the target OS (Windows or Linux).

BIOS options to configure COM3 and COM4 are added to D3713 with BIOS Version  $\geq$  R1.7.0 and to D3723 with BIOS Version  $\geq$  R1.2.0.

### Configuration 1 – Default (as before)

COM1 to COM4 are working in legacy mode (ACPI/PNP0501/0 .... /3. Limited functionality for COM3 and COM4 (regarding the BAUD rate). But this configuration generally works for both OS, Linux and Windows.

Configure BIOS settings for COM3/COM4 ([Advanced > Super I/O Configuration > Serial Port X Configuration]):

- [Serial Port] = “Std IO”
- [UART Driver Type] = “AMD UART Driver”

### Configuration 2 – preferred for Linux OS

COM1 and COM2 are working in legacy mode (ACPI/PNP0501/0 + /1) -> No limitation in BAUD rate.

COM3 and COM4 are configured as AMD UART controller (ACPI/AMDI0020). AMDI0020 does not generate RS232 ports for Windows.

Configure BIOS settings for COM3/COM4 ([Advanced > Super I/O Configuration > Serial Port X Configuration]):

- [Serial Port] = “Memory IO”
- [UART Driver Type] = “AMD UART Driver”

### Configuration 2 – preferred for Windows OS

COM1 and COM2 are working in legacy mode ((ACPI/PNP0501/0 + /1) -> No limitation in BAUD rate.

COM3 and COM4 are configured as AMD Serial Port (ACPI/AMDI0021). AMDI0021 is compatible with Serial.sys driver. Linux does not support AMDI0021.

Configure BIOS settings for COM3/COM4 ([Advanced > Super I/O Configuration > Serial Port X Configuration]):

- [Serial Port] = “Memory IO”
- [UART Driver Type] = “AMD Serial Driver”